PATENT CLAIMS

1. Depot with a automatic storing system for articles with at least one input and one delivery station, characterised in that at least one of the input stations (3, 4) comprises at least two cells (9), whereby each of the at least two cells (9) is usable alternatively once as loading cell for the receipt of a new article and the other time as transfer station onto the storing system of an article received before for an allowing of a receipt of a new article substantially at the same time and parallel to a transferring of the previously received article onto the storing system.

2. Depot according to claim 1, characterised in that each cell (9) is in a different position during the receipt of an article and during the transferring of an article onto the depot system.

3. Depot according to one of the preceding claims, characterised in that the cells (9) of the input station (3,4) form a unit which is positionable into at least two positions.

4. Depot according to one of the preceding claims, characterised in that the cells (9) are displaceable in a vertical direction.

5. Depot according to one of the preceding claims, characterised in that the input station (3,4,) includes two cells (9) of which each is displaceable between two positions.

6. Depot according to one of the preceding claims, characterised in that at least one of the cells (9) comprises means (8) for a rotating of the article.

7. Depot according to one of the preceding claims, characterised in that it is designed for a selective

operation of at least one of the input stations (3,4) as delivery station.

8. Depot according to one of the preceding claims, characterised in that it is designed for a selective operation of at least one delivery station (5,6,7) as input station.

9. Depot according to one of the preceding claims, with a shelf like structure and at least one moveable shelf serving apparatus, characterised in that besides the moveable shelf serving apparatuses (1,2), additional driven stationary displacement means (12) are foreseen for a displacing of articles in the depot system and/or for a storing of articles on storing places of the depot system and/or for a delivering of articles from depot places of the depot system.

10. Depot according to one of the preceding claims, characterised in that stationary displacement means (12) are foreseen for a transferring of the articles from the cells (9) to the depot system and/or vice versa.

11. Depot according to one of the preceding claims, characterised in that the stationary displacement means (12) are foreseen for a transferring of the articles from the depot system to at least one delivery station (5,6,7) and/or vice versa.

12. Depot according to one of the claims 10-11, characterised in that the depot is designed in such a manner that the transferring of an article between a loading station (15), an input station (3,4) or a delivery station (5,6,7) of the depot and the stationary displacement means (12) may proceed at the same vertical position as the transferring between the loading station (15), the input station (3,4) or the delivery station (5,6,7) and the user.

13. Depot according to one of the claims 10-12, characterised in that it is designed in such a manner that the transferring between a loading station (15), an input station (3,4) or a delivery station (5,6,7) of the depot and the stationary displacement means (12) coincides with the direction and/or is oriented transverse to the direction of the transfer between mentioned station (3,4,5,6,7,15), and the user.

14. Depot, specifically according to one of the preceding claims with at least two shelf serving apparatuses (1,2,) characterised in that the shelf serving apparatuses (1,2) comprise transfer means for a direct transfer of at least one article between the shelf serving apparatuses (1,2).

15. Depot according to claim 14, characterised in that the shelf serving apparatuses (1,2) comprise receiving places (E,F,G,H) for a temporary storing of articles and at least a first of the shelf serving apparatuses (1,2) comprises more receiving places (E,F,G,H) than a second shelf serving apparatus (1,2) and specifically the second shelf serving apparatus (1,2) comprises only one receiving place (E,F,G,H).

16. Depot according to claim 15, characterised in that the receiving places (E,F,G,H) of the shelf serving apparatuses (1,2) are moveable vertically and specifically in that they are moveable in a vertical direction independent from each other.

17. Depot according to one of the claims 14-16, characterised in that the transfer means are designed for the possibility of a transfer of at least one article during the moving operation of the shelf serving apparatuses (1,2).

18. Depot according to one of the preceding claims, characterised in that it comprises at least one

stationary lifting means (14) for a vertical displacing of articles in the depot system.

19. Depot with a automatic storing system for articles, specifically according to one of the preceding claims, characterised in that it comprises at least one stationary means (8) for a rotating of articles in the storage system and specifically that it includes a stationary means (8) for rotating articles around a substantially vertical axis.

20. Application of a depot according to one of the preceding claims as parking house for vehicles.

21. Method of operating a depot which includes a plurality of places for articles, with an automatic storing system with a shelf like structure, characterised in that the depot includes transfer means, whereby an article may be displaced by each transfer means between at least two places, and that for a storing and delivering of a single article at least two transferring means are operated which conduct in a mutual, work dividing kind of operation the operating steps necessary for a depositing and delivering, respectively, of said article, so that a performing of these working steps proceeds in part simultaneously.

22. Method of operating a storage house according to claim 21, characterised in that the at least two transfer means operated for the storing and delivering of a single article include at least two shelf serving apparatuses (1,2), which conduct the operating steps for a storing and delivering, respectively, of the article in a mutual work divided kind of operation so that a performing of these working steps proceeds in part simultaneously.

23. Method of operating a storage house according to one of the claims 21-22, characterised in that the at least two transferring means operated for the depositing and

delivery of one single article comprise at least two driven stationary displacement means (12), which perform the operating steps necessary for a depositing and delivering, respectively, in a mutual work dividing kind of operation so that a in part simultaneous conducting of these working steps occur.

24. Method of operating a depot according to one of the claims 21-23, characterised in that the at least two transferring means operated for the storing and delivering of a single article comprise at least one shelf serving apparatus (1,2) and at least one driven stationary displacement means (12), which perform in a mutual work dividing operation the working steps needed for the storing and delivering, respectively, of the article, so that a in part simultaneous execution of these working steps occurs.

25. Method of operating a depot according to one of the claims 21-24, characterised in that at least one of the two transferring means operated for the storing and delivering of an article is a stationary lifting means (14) for a vertical displacing of articles.

26. Method of operating a depot according to one of the claims 21-25, characterised in that the shelf serving apparatuses (1,2) can receive articles and in that at least a first shelf serving apparatus (1,2) can receive more articles than a second shelf serving apparatus (1,2) and specifically that the second shelf serving apparatus (1,2) can receive only one single article.

27. Method of operating a depot according to one of the claims 21-26, characterised in that an article can be transferred between the shelf serving apparatuses (1,2) directly.

28. Method of operating a depot according to one of the claims 21-27, characterised in that a transferring of

at least one article between the shelf serving apparatuses (1,2) can proceed during a moving operation of the same.

29. Method of operating a depot according to one of the claims 21-28, characterised in that articles are arranged in several layers behind each other in the shelves and in that a first shelf serving apparatus (1,2) retrieves articles located in front of the depot space to be accessed and re-deposits these articles and that a second shelf serving apparatus (1,2) removes an article to be moved from the storing space to be accessed or stores the same in the storing space to be accessed.

30. Method of operating a depot according to one of the claims 21-29, characterised in that the first shelf serving apparatus (1,2) deposits or removes the articles located in front of the storage space to be accessed while the second shelf serving apparatus (1,2) retrieves the article to be moved from a input station (3,4) or from a transferring means of the depot or brings it to a delivery station (5,6,7) or a transferring means of the depot.

31. Method of operating a depot according to claim 30, characterised in that the input station (3,4) and/or the delivery stations (5,6,7) are formed by a loading station (15), which is operated as desired as input or delivery station.

32. Method of operation a depot with an automatic storing system with stationary displacement means (12) according to one of the claims 21-31, characterised in that the transferring of an article between the loading station (15), an input station (3,4) or a delivery station (5,6,7) of the depot and the stationary displacement means (12) proceeds directly and at the same vertical position as the transferring of the article between the loading station (15), the

input station (3,4) or the delivery station (5,6,7) and a user.

33. Method of operating a depot with an automatic storage system with stationary displacement means (12) according to one of the claims 21-32, characterised in that the transferring between a loading station (15), an input station (3,4) or a delivery station (5,6,7) of the depot and the stationary displacement means (12) proceeds directly and aligned with the direction and/or transversely to the direction of the transfer between mentioned stations (3,4,5,6,7,15) and the user.

34. Method of operating a depot with an automatic storing system for articles, specifically according to one of the claims 21-33, characterised in that the depot comprises in its storing system at least one stationary means (8) for a rotating of articles, specifically a stationary means (8) for a rotating of articles around the vertical axes and that articles are brought into a desired orientation ahead of the storing and/or ahead of the delivery.

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